



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/740,465	12/22/2003	Jung Sang Back	0465-1062P	3623
2292 7590 11/30/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER MOON, SEOKYUN	
			ART UNIT 2629	PAPER NUMBER
			NOTIFICATION DATE 11/30/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/740,465	Applicant(s) BAEK ET AL.	
	Examiner Seokyun Moon	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 is/are allowed.
- 6) ☒ Claim(s) 10-12 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 13-15 and 19-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

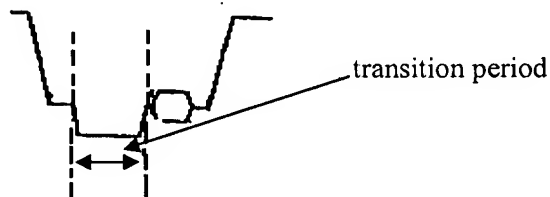
DETAILED ACTION

1. Prior to the discussion regarding the Applicants' arguments, the Examiner respectfully submits that the subject matter of the instant Application might be different or distinguishable from the prior arts of record, but such subject matter is not presented and/or disclosed in the claims specifically enough to distinguish the instant invention from the prior arts of record.

Response to Arguments

2. The Applicants' arguments filed on September 13, 2007 have been fully considered.

The Applicants pointed out that neither the AAPA nor the base reference to Park discloses or suggests the previously presented claim limitation, "*first skipping data latch during a first transition period of the video signal*" and "*second skipping data latch during a second transition period of the video signal*" [pg 10 lines 7-10]. Examiner respectfully disagrees. Examiner respectfully submits that the Applicants have failed to explain how the Examiner's interpretation regarding the AAPA is not reasonable or proper with respect to the disclosed claim limitation. As shown on drawing 1 provided below (which is equivalent to figure 2 of the instant application), the AAPA teaches the video signal having a transition period (note that since the value of the video signal is changed during the period indicated below, it would be reasonable to interpret the period as a transition period).



Drawing 1

Furthermore, as explained in the previous Office Action, since the signal, "HSY", goes to a low level during the transition period, data latching operation of the time controller is paused during the transition period, and thus the AAPA teaches the disclosed claim limitation, "*first skipping data latch during a first transition period of the video signal*" and "*second skipping data latch during a second transition period of the video signal*".

The Applicants further pointed out that none of the cited references teaches the amended claim limitation, "*a clock enable signal disabled at the first transition period of the video signal*" [pg 10 lines 16-18]. Examiner respectfully disagrees. Examiner respectfully submits that it would be reasonable to construe any one of the signals, "HSY", "HSP", and "SSP" as a clock enable signal since all of the signals are periodic and thus all of the signals are clock signals having a low frequency. Furthermore, since all of the signals are related to timing of driving operation of the display, such as determining a timing of starting a source signal, synchronizing a timing of driving a video signal to a clock signal, etc, all of the signals are related to enabling driving operation of the display. Therefore, it would be reasonable to interpret any one of the signals, "HSY", "HSP", and "SSP" as a clock enable signal.

For the foregoing reasons, the Examiner respectfully submits that the Applicants' arguments are not persuasive.

Claim Objections

3. **Claim 10** is objected to because of the following informalities: "*the first transition period*".

For further examination purpose, the claim limitation will be interpreted as, "*the transition period*".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 10-12, and 16-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicants Admitted Prior Art (here in after "*AAPA*") in view of Park (US 6,362,804).

As to **claim 10**, *AAPA* teaches a method for displaying a video signal having a horizontal back porch in a display device [par. (0011) lines 1-2 and par. (0012) lines 1-3], comprising:

generating a source start pulse signal ("*SSP*" under "<*Normal Operation Method*>") [fig. 2];
latching pixel data for a display ("*abnormal display*" under "<*Normal Operation Method*>"); and
skipping latch of subsequent pixel data (as "*HSY*" signal goes to a low level, data latching operation of the timing controller is paused) [fig. 2] during a transition period (a portion of "*Hori Sync* 4.7 μ s \pm 0.1") [fig. 2] of the video signal by using a clock enable signal ("*HSY*") disabled at the transition period of the video signal;

AAPA does not teach latching pixel data for a black display from a start of the source start pulse signal to an end of the horizontal back porch.

However, Park teaches a method for displaying a video signal in a display device [abstract lines 1-3], comprising latching pixel data for a black display ("*BD*") from a start of a source start pulse signal ("*SPI*") to a start of a non-black image signal [fig. 9].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the display device of *AAPA* to latch pixel data for a black display from a start of the source start pulse signal to the start of the non-black image signal which is equivalent to the end of the horizontal

back porch, as taught by Park, in order to display the image having an aspect ratio which is different from the aspect ratio of the display device in a proper position on the display device.

As to **claim 11**, AAPA teaches the method of claim 10, comprising latching subsequent pixel data during a high-level of the video signal ("*Video Signal*") and skipping latch of subsequent pixel data (as "*HSY*" signal goes to a low level, data latching operation of the timing controller is paused) [fig. 2] during a second transition period (a portion of "*Hori Sync 4.7 μ s \pm 0.1*" included in the next period) [fig. 2] of the video signal by using a clock enable signal ("*HSY*") disabled at the second transition period of the video signal.

As to **claim 12**, AAPA [fig. 2] teaches the source start pulse signal ("*SSP*" under "<*Normal Operation Method*>") being outputted after a predetermined time period from a horizontal start pulse ("*HSP*").

As to **claim 16**, all of the claim limitations have already been discussed with respect to the rejection of claim 10 since it is required for the display device of AAPA to have various means executing the driving method disclosed in claim 10.

As to **claim 17**, all of the claim limitations have already been discussed with respect to the rejection of claim 11 since it is required for the display device of AAPA to have various means executing the driving method disclosed in claim 11.

As to **claim 18**, all of the claim limitations have already been discussed with respect to the rejection of claim 12.

Allowable Subject Matter

6. **Claims 1-9** are allowed.

7. **Claims 13-15, and 19-21** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seokyun Moon whose telephone number is (571) 272-5552. The examiner can normally be reached on Mon - Fri (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (572) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/740,465
Art Unit: 2629

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 23, 2007 – s.m.

A handwritten signature in black ink, appearing to read "Sumati Lefkowitz", with a stylized flourish at the end.

SUMATI LEFKOWITZ
SUPERVISORY PATENT EXAMINER